

• COLORADO RIVER •  
**AQUEDUCT NEWS**

THE METROPOLITAN WATER DISTRICT



OF SOUTHERN CALIFORNIA

Vol. 1

OCTOBER 5, 1934

No. 18



WHITEWATER NO. 2

This interesting shot shows West Construction Company crews installing steel liner plate in the east heading,

COLORADO RIVER  
**AQUEDUCT NEWS**  
 THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
 LOS ANGELES, CALIFORNIA

Published twice monthly in the interest  
 of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.

Vol. 1 October 5, 1934 No. 18

### MILESTONES

It's enough to make one dizzy—the speed with which developments are taking place in connection with the Colorado River Aqueduct project.

First comes the calling for bids on 110 miles of aqueduct conduit, siphon, and canal, tenders to be opened on October 11.

Then news from Washington of the agreement of the RFC to buy an additional \$15,000,000 of aqueduct bonds during the current fiscal year.

No time is allowed for the digestion of this information—on the same day, General Manager Weymouth announces the calling for bids on thirty more miles of conduit and siphon.

Then, in short order, comes word that Potrero shaft has been dewatered and that excavation soon will be launched again.

And, as if all this weren't enough for one month, the first concrete tunnel lining is poured at Mecca Pass, and announcement is made of the commencement of work by Six Companies crews on the Parker Dam job.

Yes, it's all enough to make one dizzy. Never in the history of the aqueduct project have so many important developments come in such a short time to signalize the rapid pace at which the project is moving forward.

### GOOD LUCK

In other columns of this issue is carried the announcement of the resignation of C. W. Kudell as president of the Employees' Board of Control because of his acceptance of another position. Being president of an employee group is one of those jobs—lots of work and little thanks. Despite this, Mr. Kudell, like his predecessor, Bill Aultman, has given unstintingly of his time and energy and has rendered signal service to the men and women who make up the District forces. The News wishes to say thanks and bon voyage.

# FIRST WORK IS LAUNCHED BY SIX COMPANIES, INC., ON PARKER DAM JOB

Crews of Six Companies, Inc., contractors on the Parker Dam unit of the Colorado River Aqueduct, launched the first construction work in connection with the big job last week, as work started on the erection of temporary camp buildings and water and power lines.

The contracting firm will secure power from the system of the Metropolitan Water District which supplies energy to all camps along the aqueduct line. The water supply will be from a well located near the river, pumping into a 125,000 gallon storage tank, to be located on the hill between the camp and the job.

Anderson Brothers Board and Supply Company will operate the mess-hall and dormitories for Six Companies Inc. and Six Companies Inc. subcontractors. Anderson Brothers will establish a temporary camp for 75 to 100 men on October 1st, and this camp will be used until the permanent buildings are ready for occupancy.

### Road First

First construction work, according to tentative information now available, will include the building of a road from the existing Water District highway system to the dam site, and the building of a bridge to extend across the Colorado River.

Work on the dam will be carried forward from a modern construction town to be called Whipple and located on the California bank of the river. The new community is to be named for Lieutenant Whipple, who conducted the first survey across the territory in the middle of the last century.

### Tunnel Work Soon

It is understood that Six Companies officials plan to get under way with the first work on the driving of the two diversion tunnels, to be located on the Arizona side of the river, during the latter part of this month, or as soon as the trestle across the stream is completed.

It is estimated that tunnel work will be completed by July 1, 1935.

Commencement of excavation for the dam itself is planned for next September, and is expected to occupy approximately six months time. One million

and a half cubic yards of muck will be taken out.

A cableway will be taken from the Boulder Dam project, it is planned, to aid in pouring operations. Two hundred and sixty thousand cubic yards of concrete will go into the dam proper, in addition to 45,000 cubic yards in other dam structures such as gatehouses, piers, etc.

Workers on the project will be hired from the states of California and Arizona exclusively, through the government employment office. A forty-hour week will be observed.

### 400 Peak Employment

Six Companies officials estimate that the peak employment, around 400 men, will be reached during the excavation period next fall.

Notice was received last week from Six Companies headquarters that J. P. Yates has been appointed as their resident engineer on Parker Dam.

The work of excavating test pits at the gravel deposits on the Bill Williams River has been completed. A total of 303 feet of pits was dug. The sacking of samples and transportation across the river is practically completed, and shipment to the Denver laboratory is scheduled in the near future.

### 800 Feet Long

Parker Dam will be of concrete arch design, 800 feet long across its crest and 315 feet high from bedrock. Its maximum thickness will be 100 feet. An eighteen-foot roadway will be built across its crest. A feature of the structure will be five Stony gates, 50 feet by 50 feet, mounted on the crest to permit the passage of flood waters.

The reservoir to be formed by the dam will be approximately 50 miles long, extending upstream almost as far as the city of Needles on the California bank of the river. The reservoir capacity will be 717,000 acre feet. The water level of the river will be raised 80 feet by the dam.

Construction of Parker Dam is being launched now rather than at a later date in order to take advantage of the low flow of the river which will result from the building of Boulder Dam reservoir 150 miles upstream.

# R.F.C. WILL PURCHASE \$15,000,000 ADDITIONAL AQUEDUCT BONDS; BIDS TO BE RECEIVED ON THIRTY MORE MILES OF WORK

Acceleration of construction work on the Colorado River Aqueduct, and the launching of new work on 140 miles of canals, conduits, and siphons, in addition to the 91 miles of tunnels now in progress, was, in effect, authorized last week by the Reconstruction Finance Corporation.

Action was taken by the RFC Board of Directors in Washington authorizing the purchase by that Federal body of \$15,000,000 in Metropolitan Water District bonds during the present fiscal year, in addition to the \$40,000,000 in aqueduct bonds which the RFC previously had agreed to buy. The additional \$15,000,000, together with the funds already available, will be sufficient to finance all aqueduct construction expenditures during the present fiscal year, according to General Manager Frank E. Weymouth of the Water District.

## Expansion Assured

Officials of the Metropolitan Water District stated that the action of the RFC in agreeing to purchase \$15,000,000 of additional District bonds is in line with the negotiations and verbal agreements reached between the Federal officials and District representatives several weeks ago. They stated that the action of the RFC assures the pushing forward of aqueduct work now in progress and the immediate expansion of this construction program.

The Metropolitan Water District several weeks ago advertised for bids on the construction of 110 miles of aqueduct canals, conduits, and siphons. This portion of aqueduct work, including the cost of materials, rights of way, and administration, will amount to approximately \$35,000,000, it was estimated. Bids on this work will be opened October 11, and it is estimated that employment for an additional 2,000 men will be provided.

## Bids Called

General Manager Weymouth placed advertisements on October 1 for the construction of approximately 30 miles of aqueduct conduits and siphons, in addition to the 110 miles covered by the bids to be opened October 11. This will mean that construction work on the entire 241 miles of the main aqueduct line is to be set under way this year. The cost of the

opened and read in Room 3 in the basement of the building.

## 30 Miles of New Work

All of the new work is located in Riverside County, California, and comprises 30.5 miles of aqueduct construction between a point about 30 miles northwest of the city of Indio and a point about 10 miles south of the city of Riverside.

In addition to 18.07 miles of conduit and 11.52 miles of siphons, specifications cover construction of 0.91 miles of outlet channel. This channel is to have a bottom width of approximately 25 feet.

The conduit is to be of semi-elliptical section with heights of about 15.4 and 16 feet. Siphons generally are to be of precast concrete pipe or of monolithic (cast in place) construction, alternative bids being called for these two types. For two of the siphons, approximately 1.8 miles long, alternative bids will be received for welded steel or precast pipe construction. Precast construction only will be considered for Schedule 20K, 1.48 miles in length.

## Engineers' Estimate

As is the policy in such matters, Mr. Weymouth will file with the District board of directors a sealed estimate of the cost of all of the work being advertised. This document will be filed 24 hours previous to the opening of contractors' bids. After consideration of the General Manager's estimate and the bids received, the directors will determine whether to order the various construction units done by contractors' submitting the lowest responsible bid or by forces employed directly by the Metropolitan Water District.

The size of the work which is being advertised under the new specifications is indicated by the following quantities:

## Quantities Given

Concrete, 516,300 cubic yards; steel, 19,366,000 pounds; excavation, 4,835,000 cubic yards common and 150,000 cubic yards rock; backfill, 2,990,000 cubic yards.

Meanwhile preparations are being made for opening bids on October 11 on the 110-mile block of aqueduct canal, siphon, and conduit construction previously advertised. These bids also will be opened and read at District headquarters, 306 W. Third Street, Los Angeles, at 10 A. M.

## \$1,500,000 Aqueduct Bonds Bought

By P. W. A.

**In accordance with an agreement entered into with the Public Works Administration several months ago, the Water District Board of Directors last week accepted the bid of that Federal body for the purchase of \$1,500,000 of District bonds to be used to finance the beginning of work on Parker Dam. The rate of interest to be paid on the bonds is 4 per cent. In addition to the \$1,500,000 in bonds purchased by the PWA an additional amount of approximately \$500,000 is to be made available to the District as a grant from the Federal Government.**

**Preliminary work on Parker Dam is now being set under way by the contracting firm of Six Companies, Inc., whose low bid for the construction of this project was accepted by the Government.**

30 miles of conduits and siphons advertised October 1, including materials and rights of way, has been estimated at approximately \$10,000,000, and this construction work will provide employment for at least 1,000 men.

Sealed proposals for building the newly advertised conduit and siphons will be received by the District at its office building, 306 W. Third Street, Los Angeles, until 10 A. M., October 31, at which time they will be publicly

Schedule Group Number	Length in Miles			
	Conduit	Siphons	Outlet Channel	Total
18 .....	5.11	0.12	.....	5.23
18K .....	.....	1.86	.....	1.86
19 .....	6.68	.....	.....	6.68
19K .....	.....	0.42	.....	0.42
20 .....	.....	3.51	.....	3.51
20K .....	.....	1.48	.....	1.48
21 .....	.....	2.76	.....	2.76
22 .....	.....	1.37	.....	1.37
23 .....	6.28	.....	0.91	7.19
Total .....	18.07	11.52	0.91	30.50

## Field Plays Host At Annual Picnic

Old Sol and a goodly number of Metropolitan Water District field and office employees were on hand last Sunday, September 30, for the annual M. W. D. picnic at Riverside. Field forces play host to the Los Angeles office group.

Most of the picnickers arrived about 11 o'clock, and many old friendships and acquaintances were renewed as well as many new ones made. Some braved the heat for a few sets of tennis, but a large part of the group made a dash for the swimming pool, immediately upon arrival.

Luncheon was served at 1 o'clock. With the basket lunch arrangement and the name plate system put into use by the hosts, "chow" time was a high-light of the affair. Excellent coffee was served to the entire group by the field forces.

After the material needs of the picnickers had thus been taken care of, a portion of the crowd adjourned to the baseball diamond for less substantial, but equally amusing entertainment—the annual duel between the Banning "All-Stars" and the Los Angeles nine (called by one of its members, "The Butter-fingers").

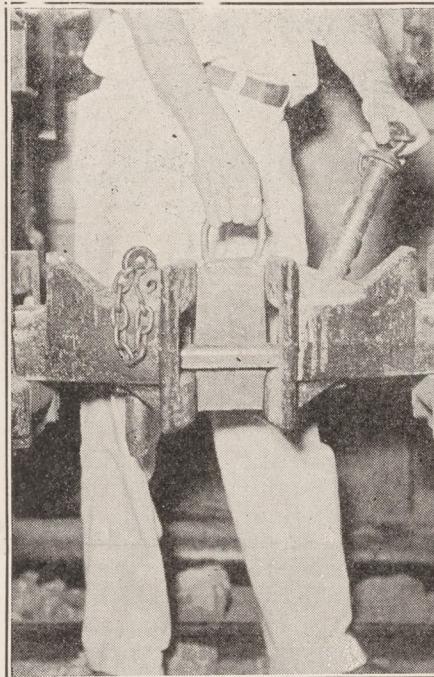
To quote from the above-mentioned Los Angeles team member:

"The Banning aggregation ran away with the race to the merry tune of about 30 to 8, the home guard furnishing the grandstand with plenty of laughs in the procedure. Of course the Los Angeles boys never had a chance, because they were simply floored before the game even started by the pretty, flaming orange sweat shirts and socks worn by the "All-Stars."

## Rapid Progress is Made on B. D. Project

Indicating the rapid progress being made on Boulder Dam construction are figures on concrete pouring released last week by Reclamation Bureau officials at Boulder City.

A total of 2,482,000 cubic yards of concrete had been poured up to August 31, the report showed. The high pour elevation of the slot of the dam on August 31 was 785, while the high pour on the dam that same date reached elevation 1015.



A type of modified bar coupler which is in use on the aqueduct line, showing safety handle which places a man's hand out of the danger zone, and the plate which prevents the coupler heads coming together. In the adjoining column, Safety Engineer T. W. Osgood discusses haulage accidents and their prevention.

## Shifts In Personnel Of District

### Made

Changes in organization, effective October 1, under which most field business will be handled directly between the various divisional headquarters and the Los Angeles office, instead of being routed through the Banning office, were announced last week by General Manager Weymouth.

At the same time, several changes in field personnel were announced. J. B. Bond will be in direct charge of Divisions 5 and 6, while Division Engineer B. C. Leadbetter has been transferred to Division 4, succeeding R. B. Diemer.

Mr. Diemer has been moved into the Los Angeles office, and now has charge of engineering work on the Distribution Division, succeeding W. E. Whittier. Mr. Whittier has been made division engineer on Division 2, which was formerly consolidated with Division 3.

Assistant General Manager J. L. Burkholder has moved his office from Los Angeles to Banning in order to maintain closer contact with aqueduct operations in the field.

## Safety On the Aqueduct

By T. W. OSGOOD,  
*Safety Engineer*

Haulage accidents rank among the three high contributing causes of injury to workmen in tunnel construction operations. Among these accidents, the coupling of cars presents an ever-present hazard which more commonly results in crushed fingers and hands, but sometimes in injuries of much greater severity.

How to provide maximum protection against these occurrences is a matter which has been given wide attention.

There are many types of couplers available, such as the usual links, bars, chains, etc., but unquestionably they are all inferior from the safety viewpoint to the automatic couplers.

### Automatic Predominate

On this work, automatic couplers predominate and of the link and bar type, the large percentage is equipped with safety features.

A type of modified bar coupler which is in use, is shown in the accompanying picture, and attention is called to the safety handle which places a man's hand out of the danger zone, and to the plate which prevents the coupler heads coming together.

The use of automatic couplers, bar couplers equipped with the safety features, together with safety training of the men and adservance of haulage rules, have occasioned a low accident experience on the Aqueduct in this connection.

## Leadbetter Feted By Div. 5 & 6 Employees

M. W. D. employees on Division 5 and 6 gave a dinner party Wednesday evening, September 26, in honor of B. C. Leadbetter, who has been transferred to Division 4. There was a hundred per cent turnout for the affair, every employee on the two divisions being present. Dinner was served at the Ellen Scorse Spanish Ranch near San Jacinto. A cigar humidor was presented as a token of appreciation and friendship from the boys. Mr. Leadbetter expressed thanks for the loyalty he had found while serving on five and six.

## DIRECTORY

### BOARD OF DIRECTORS

W. P. Whitsett, Chairman
Franklin Thomas, Vice-Chairman
S. H. Finley, Secretary
Anaheim.....O. E. Steward
Beverly Hills.....George R. Barker
Burbank.....J. L. Norwood
Compton.....William H. Foster
Fullerton.....Walter Humphreys
Glendale.....Bernard Brennan
Long Beach.....William M. Cook
Los Angeles.....I. Eisner
Los Angeles.....Perry H. Greer
Los Angeles.....Walter A. Ham
Los Angeles.....D. W. Pontius
Los Angeles.....John R. Richards
Los Angeles.....Victor H. Rossetti
Los Angeles.....W. P. Whitsett
Pasadena.....Franklin Thomas
San Marino.....J. H. Ramboz
Santa Ana.....S. H. Finley
Santa Monica.....Arthur A. Weber
Torrance.....Charles T. Rippy
Charles H. Toll, Treasurer
D. W. Pontius, Controller

### GENERAL STAFF

General Manager and Chief Engineer.....	F. E. Weymouth
Asst. General Manager.....	J. L. Burkholder
Asst. Chief Engineer.....	Julian Hinds
General Counsel.....	James H. Howard
Asst. Controller.....	J. M. Luney
General Superintendent.....	James Munn
Chief Elec. Engineer.....	J. M. Gaylord
Asst. to Gen. Mgr.....	Don J. Kinsey

### DIVISION ENGINEERS

Division 1.....	R. C. Booth
Division 2.....	W. E. Whittier
Division 3.....	John Stearns
Division 4.....	B. C. Leadbetter
Divisions 5 and 6.....	J. B. Bond

### SUPERINTENDENTS

Colorado River, Copper Basin and Whipple Mt. Tunnels, Walsh Construction Co., F. T. Huntington, Gen. Supt.; W. A. Huntington and E. A. Hatch, Tunnel Supts.
Coxcomb Tunnel and Iron Mt. shaft, Winston Bros., E. A. Bernard, Gen. Supt.; F. T. Hillman and R. B. Johnson, Tunnel Supts.
Iron Mt. Tunnel, West Portal, Utah Constr. Co., Ben Arp, Gen. Supt.
East Eagle Mt. Tunnel and West Eagle Mt. Tunnel, east portion, Broderick & Gordon, C. J. Kavanagh, Gen. Supt.
West Eagle Mt. Tunnel, west portion L. E. Dixon and Bent Bros., P. C. Quinn, Gen. Supt.
Hayfield Tunnel No. 1, Hunkin & Conkey Constr. Co., G. B. Hoag, Gen. Supt.; F. Backlund, Tunnel Supt.
Hayfield Tunnel No. 2, Shofner & Gordon, H. E. Warden, Gen. Supt.
Cottonwood Tunnel, J. F. Shea Co., Inc., Gilbert Shea, Gen. Mgr.; Joe Bonner and Carl Nelson, Tunnel Supts.
Mecca Pass Tunnels, Morrison-Knudsen, Gil Griffen, Gen. Supt.
Coachella Division, R. M. Merriman, Division Supt.
Yellow Canyon Adit, E. Coachella Tunnel—District Force Account.....W. L. Taylor
Fargo Adit, East Coachella Tunnel—District Force Account.....J. H. Manwaring
Berdoo Adit, East Coachella Tunnel—District Force Account.....F. A. Weller
Pushawalla Adit, East Coachella Tunnel—District Force Account.....Kenneth MacIsaac
Thousand Palms—District Force Account.....D. L. Reaburn
Wide Canyon—District Force Account.....John Jackman
Long Canyon—District Force Account.....E. E. McCabe, Little Morongo—District Force Account.....R. L. Bryant, Whitewater Tunnels, West Constr. Co., H. E. Carleton, Gen. Supt.; Angus MacDonnell, Tunnel Supt.
San Jacinto Tunnel, Wenzel & Henoch, Walter Baernecke, Gen. Supt.; W. A. Boyd, Walter Baer, and Jack May, Tunnel Supts.
Bernasconi Tunnel, Hamilton & Gleason Co., H. J. King, Gen. Supt.
Valverde Tunnel, Dravo Contr. Co., R. W. Remp, Gen. Supt.; H. C. Richardson, Asst. Gen. Supt.; Dean Luther, J. R. Glaeser, Jack Stone, and Fred Youmans, Tunnel Supts.



Division 6 Headquarters, most westerly of the Metropolitan Water District offices along the aqueduct line.

## Beall New Board of Control Head

H. A. Beall, personnel officer of the District, assumed the duties of president of the Employees' Board of Control last week following his election to succeed C. W. Kudell, chief of audits, who has left the employ of the District.

Mr. Kudell left the District organization on October 1 to accept a position with the firm of Lybrand, Ross Brothers and Montgomery, public accountants.

At the same time David S. Koontz, of the purchasing division, became secretary of the board, succeeding Geyne Schenk, resigned.

The Board of Control elections last week followed the election of Mr. Beall and Gregory Smith, of the Controller's office, to fill the vacancies left by the two resignations on the Governing Board of the Los Angeles offices and Distribution System Engineering.

The Los Angeles Governing Board elected Mr. Koontz president of the group and Mr. Beall secretary. Since the secretary and president of the Governing Board automatically become members of the Board of Control, they filled the vacancies left on that latter body by the resignations of Mr. Kudell and Miss Schenk.

## Water Pumped From San Jacinto Shaft

Conquest of the water in Potrero shaft of San Jacinto tunnel was being completed this week as Wenzel & Henoch crews continued with concreting the sump.

Water in the shaft was first lowered sufficiently to permit entry into the tunnel on September 21. With water still seven feet deep in the bottom, an inspection of the headings was made by means of a boat.

It was found that most of the water appeared to be coming from a hole approximately two feet square in the upper right-hand corner of the east face. The flow seemed to be coming from the south side of the tunnel. The west heading was found to be clean and unaffected.

The muck pile in the east heading was clean of silt or mud, and extended back 55 feet from the face. At the face the muck pile was within three feet of the top of the tunnel. The size of the muck varied from boulders of one or one-half cubic foot down to a medium sand, formation being aplite and diorite mixed.

The concreting has been completed in the pump and skip pocket and concrete bases have been constructed for the permanent station pumps. The inflow at present is 2 thousand gallons per minute.

**BEST PROGRESS  
This Period**

 Rock Tunnels - Copper Basin No. 2, 946 ft.  
 Gravel Tunnels - Whitewater No. 2, 205 ft.

**TUNNEL PROGRESS**

 September 1 to 30, 1934  
 Tunnel Excavated to Date, 43.08 Miles

**BEST WEEK'S PROGRESS  
This Year**

 Rock Tunnels - Colorado River, 265 ft.  
 Gravel Tunnels - Whitewater No. 2, 233 ft.

TUNNELS ON CONTRACT	Length in feet	Number of Shifts	EXCAVATION PROGRESS IN FEET			TUNNELS ON CONTRACT	Length in feet	Number of Shifts	EXCAVATION PROGRESS IN FEET		
			Average Per Shift	This Period	Total to date				Average Per Shift	This Period	Total to date
Walsh Constr. Co. COPPER BASIN, No. 1 West Portal	(5514) 5514 (752) 752	89	10.1	902	3039	J. F. Shea Co. COTTONWOOD East Portal West Portal	(20,105) 10,114 9991	73 78	7.5 9.7	546 757	8064 7912
COPPER BASIN, No. 2 East from adit Adit West from adit	(11,580) 1878 330 9702	87	10.9	0 0 946	1878 330 6798	Morrison-Knudsen MECCA PASS No. 1, West Portal No. 2, West Portal No. 3, East Portal	(5,940) 338 997 4605		0 0	0 0	338 997 4605
WHIPPLE MT. East from adit Adit West from adit	(32,265) 18,352 924 13,913	90	6.9	626 0 614	6123 924 5237	West Constr. Co. WHITEWATER No. 1, West Portal No. 2, East Portal	(10,232) 2060 8172	18 48	5.6 4.3	100 205	135 8172
Winston Bros. IRON MT. East from shaft Shaft West from shaft	(39,759) 9844 165 13,743	78	4.4	347 0 596	2845 165 5962	Wenzel & Henoch SAN JACINTO East from Cabazon Cabazon shaft Cross drift West from Cabazon	(67,415) 8553 246 935 22,839	90	3.6	320 0 0	1219 246 935
Utah Constr. Co. IRON MT. West Portal	16,172	90	7.4	670	8827	East from Potrero Potrero shaft West from Potrero West Portal	20,589 796 6712 8722	90	6.5	589	4488
Winston Bros. COXCOMB East Portal West Portal	(17,795) 8765 9030	78	7.7	600 0	7183 0	Hamilton & Gleason BERNASCONI East Portal	(6220) 6220	54	7.3	394	4920
Broderick & Gordon EAST EAGLE MT. West Portal	(9,442) 9442	75	5.2	393	1111	Dravo Contr. Co. VALVERDE East from Shaft 1 Shaft 1 West from Shaft 1	(38,765) 2140 64 1525	0 81	0 4.5	0 362	2140 64 1956
WEST EAGLE MT. East from adit Adit West from adit	(26,494) 7871 2008 7974	66	6.9	458 0 553	3055 2008 2394	East from Shaft 2 Shaft 2 West from Shaft 2	5400 204 5400	81	2.8	223 0	4374 204
Dixon & Bent WEST EAGLE MT. West Portal	10,649	72	4.9	353	6469	East from Shaft 3 Shaft 3 West from Shaft 3	6950 192 6950	84	0.7	59 0	2547 192
Hunkin & Conkey HAYFIELD, No. 1 East from adit Adit West from adit	(9677) 5317 511 4360	70	7.1	498 0 476	3051 511 2651	East from Adit Adit West from Adit	5117 391 5283	22	2.0	44 0	44 391
Shofner & Gordon HAYFIELD, No. 2 West Portal	(5435) 5435	46	7.3	337	3646	Total Excav. Contract Tunnels exclusive of Adits and Shafts (In Miles)	307,390 58.22	2170	6.1	13,204 2.50	136,056 25.77

**TUNNELS ON FORCE ACCOUNT**

EAST COACHELLA TUNNEL	Sched.	(96,605) 686 10,204 10,076	69	7.3	0 501 734	686 7534 7696	WIDE CANYON	Sched.	5 6 6	75 69	2.0 4.5	150 311 0	2896 6468 848
Fargo Canyon Adit East from adit West from adit	2	891 11,850 15,200	69	8.2	0 569 305	891 6745 5584	SEVEN PALMS	(16,730)	6 7	0 69	0 9.7	0 667	4810 3263
Berdo Canyon Adit East from adit West from adit	3	2042 15,824 12,456	69	5.4	0 376 700	2042 7800 7916	LONG CANYON	(15,295)	7 8	69	10.5	723	3158 0
Pushawalla Canyon Adit East from adit West from adit	4	2935 10,186 10,809	69	9.7	0 671 574	2935 5380 5611	BLIND CANYON	(6848)	8 8	69	9.8	676	2806
WEST COACHELLA TUNNELS		(81,454)					MORONGO No. 1	(5712)	8 8	69	7.5	515	2266 0
THOUSAND PALMS							MORONGO No. 2	(1820)	8 8				0
No. 1, West Portal No. 2, Tunnel	5	16,058 3838	69	6.6	458 0	6766 3838	Total excav. Force Acct. Tunnels excl. of Adits and Shafts (In Miles)	178,059 33.72	1041	7.6	7930 1.50	91,385 17.31	
							Total Tunnel Excavation (Miles)	91.94		6.6 ft.	4.00	43.08	

Heading excavation is counted as two-thirds of full tunnel excavation. Adit and Shaft progress is not included in total footage.

# NEWS FROM FIELD AND OFFICE

Work on the new five-mile highway section, running between the main aqueduct road and the site of Division 2 headquarters is now under way. Pending the construction of his new headquarters building, Division Engineer Whittier, of No. 2, is holding forth at Division 3 headquarters.

\* \* \*

J. W. Gebb, assistant chief engineer, and James C. Hoyt, of the State Industrial Accident Commission, accompanied by Safety Engineers Osgood and Munn of the District, inspected aqueduct construction work last week.

\* \* \*

Work has been started in Whitehouse Canyon preparatory to opening the west portal of Morongo Tunnel No. 1 and the east portal of Morongo No. 2. A road has been conditioned and a tool shed constructed.

\* \* \*

L. E. Dixon Company, subcontractors on placing concrete lining in Whitewater tunnels, are setting up an aggregate plant and preparing to secure concrete material.

\* \* \*

E. T. Gott, vice-president of the Dravo Contracting Company, has returned to Pittsburgh.

\* \* \*

Word was received from the American Book Company last week that the firm is publishing a new science textbook by Dr. George Hunter, and will use photographs of San Jacinto tunnel construction for illustration.

\* \* \*

Preparations are being made for the launching of work on nine frame buildings at Division 2 headquarters, near Rice. The work consists of the erection of an office building, a mess hall, a 12-car garage and repair shop, a warehouse, three five-room cottages, a 20-man dormitory, a fan house, together with appurtenant sewers, a sewage disposal plant, and a water supply system.

\* \* \*

Employees on the western end of the aqueduct line will be interested in the announcement of E. Q. Sullivan, district engineer for the highway commission, to the effect that construction work on the Jackrabbit trail, from Beaumont to Riverside, will be under way in a short time. Contract for the work has been awarded to Mittry Brothers in the amount of \$360,809.

## AQUEDUCT TEMPERATURES

September 9 to 29, Inclusive

	Max.	Min.
Div. 1	109°	57°
Div. 2 & 3	106°	51°
Div. 4	105°	54°
Div. 5 & 6	103°	38°

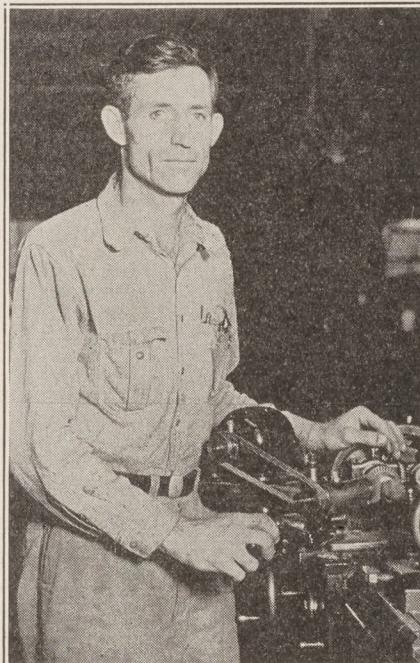
A group of members of the Compton Chamber of Commerce is scheduled to visit the aqueduct line this weekend to obtain a first-hand view of the progress of construction work.

\* \* \*

Well No. 13 of the District's construction water system, located in Vidal wash, has been placed in service. Initial steps have been taken toward the reclamation of well No. 14.

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Fred Doolittle of the Banning office has been transferred to the Iron Mountain tunnel job on Division 3.



Here is the man who makes the wheels go 'round—Al Preston, foreman of the Banning garage. Al started to work on the Colorado River Aqueduct project 'way back than in prehistoric times, in March of 1927. With a portable machine shop he roamed the desert from Bridge Canyon to Picacho during the preliminary surveys. In addition to all this, he is also known as the ancient mariner, having built the two barges used to make diamond drillings for dam location.

Col. and Mrs. Charles A. Lindbergh are reported to have flown along a section of the Aqueduct line recently enroute to Los Angeles after their widely heralded overnight stop at Blythe.

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A page from the past has been turned up by Walsh Construction Company crews in Colorado River tunnel in the form of ancient deer tracks, made in some prehistoric time in soft clay, which, through the ages, has turned to stone. The find was made about 2000 feet from the portal under two layers of volcanic rock. The tracks have been perfectly preserved, and from their appearance might have been made yesterday.

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Considerable space was devoted in the current issue of the News Letter of the National Safety Council to safety policies followed on Colorado River Aqueduct work.

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As the NEWS goes to press it is learned that Six Companies, Inc., have let a sub-contract to P. S. Webb, of Boulder City, for the construction of the principal camp buildings on the Parker Dam job. This includes two dormitories for housing 258 men, with provisions for a 76-man extension, an office and dormitory building which will house 15 men and provide office space for contractor's staff, a mess hall and store building to seat 232 men and provide general store and club room facilities for the men and their families in the camp, a hospital building, a four-room school building, and twenty 2-room family residences. The work is scheduled to be completed within 60 days.

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The boys at Whitewater No. 2 got a bad case of the galloping jitters the other day when they holed through the air shaft near the west end of the tunnel, and had a live, wriggling rattlesnake drop down into their cozy little circle. Fortunately, no casualties were reported. As a matter of fact, the reptile seemed to be suffering from a case of indigestion or something, and was not in a fighting mood.

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Nathan A. Bowers, Pacific Coast editor of Engineering News-Record, and H. A. Van Norman, chief engineer of the Los Angeles Water Bureau, were visitors along the aqueduct line this week, proceeding as far east as Parker Dam site, and then going north for a view of Boulder Dam.



No, ladies and gentlemen, this is not a scene taken at the Pomona County fair livestock exhibit — it's those daring knights of the diamond from the Banning office about to indulge in a game of Donkey Baseball. Left to right—Carpenter, Blain, Pack, Laneville, Farnsworth, Spanier, Smith, Arnold, Bart, Fox, with Holland in front. They may be distinguished from others in the picture by their uniformly short ears.

## District Exhibit Wins Prize At Fair

A feature of the German-American Trade Fair, September 16 to 23, was the Colorado River Aqueduct exhibit provided by the Metropolitan Water District, which proved to be one of the prize-winning displays of the event.

A relief map of the project, a Worthington air compressor, a pneumatic feed drill, and a variety of enlarged pictures of construction work made up the open air display. The exhibit, together with literature giving information concerning the aqueduct, was provided by the District at the request of the German-American Alliance of Greater Los Angeles.

## Weber Resigns From District Board Of Directors

Resignation of Judge Arthur A. Weber as Santa Monica's director on the Board of Directors of the District, because of his change of residence to Miramar Estates, has been accepted by the Santa Monica City Council. Judge Weber had served three and a half years on the board, and expressed regret at his inability to continue.

## DONKS DEPOSIT DARING DIAMOND DEMONS IN DIRT

The above picture is more, much more, than a study of animal life on the desert—it is irrefutable proof that there exists a game of baseball which makes the World Series seem like a quilting bee.

It is known descriptively as Donkey Baseball. Nothing less was played on the evening of Wednesday, September 29, by the Banning office team and the Banning Lions Club nine. The score (entirely incidental in this story) was 3 to 2 in favor of the M. W. D. No one knows whether to credit the players or the donkeys with this victory, although sentiment seems at this writing to favor the latter.

The game is played with all players, except the catcher, pitcher, and batter, seated (whenever possible) on the donkeys. After the batter has connected with the ball, he climbs on his animal and rides to first base. Meantime, the members of the opposing team, also mounted, are trying to catch the ball and send it to first base before the batter's donkey reaches that point.

All this, of course, is largely theoretical—as it was proved conclusively by the Banning Babe Ruths.

## Mecca Pass Crews Pour First Concrete

First concrete tunnel lining of the aqueduct was poured this week by Morrison-Knudsen crews in Mecca Pass Tunnel No. 3, following the setting in position of 90 feet of steel forms.

Meanwhile, preparations are being made for the concreting of Whitewater No. 2 by West Construction Company crews. Installation of cement and gravel plants is already under way.

First concreting in the force account tunnels of the Coachella Division is tentatively scheduled for around the first of the year at Wide Canyon.

## Murdock Has Long Record of Service

Another notable service record—that of Paul Murdock of Berdoo—was reported to the NEWS this week.

Mr. Murdock reported at Fargo Camp on February 2, 1933. On February 7, a week later, he was transferred to Berdoo, and is still there. During that period he has never lost a shift.